



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Passport20-19BB1A BYPASS RATIO: 5.9
 UNIQUE ID NUMBER: 21GE185 PRESSURE RATIO (π_{00}): 41.4
 COMBUSTOR: SAC
 ENGINE TYPE: MTF RATED THRUST (F_{00}) (kN): 84.2

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|--|-----|------|-----------------|--------------|
| D _p /F ₀₀ (g/kN) or SN | 0.1 | 19.6 | 70.2 | 0.6 |
| AS % OF ORIGINAL LIMIT | 0.6 | 16.6 | 57.2 | 2.4 |
| AS % OF CAEP/2 LIMIT (NO _x) | | | 71.4 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 77.6 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 84.5 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 94.1 | |

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 - OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

| MODE | POWER SETTING (%F ₀₀) | TIME (minutes) | FUEL FLOW (kg/s) | EMISSIONS INDICES (g/kg) | | | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|--------------------------|-------------|-----------------|--------------|
| | | | | HC | CO | NO _x | |
| TAKE-OFF | 100 | 0.7 | 0.801 | 0.01 | 0.29 | 37.60 | 0.5 |
| CLIMB OUT | 85 | 2.2 | 0.657 | 0.01 | 0.30 | 28.76 | 0.4 |
| APPROACH | 30 | 4.0 | 0.228 | 0.02 | 1.22 | 14.81 | 0.0 |
| IDLE | 7 | 26.0 | 0.078 | 0.04 | 11.03 | 6.55 | 0.0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 297 | 7 | 1450 | 5371 | - |
| NUMBER OF ENGINES | | | | 2 | 2 | 2 | 2 |
| NUMBER OF TESTS | | | | 4 | 4 | 4 | 4 |
| AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX) | | | | 0.1 | 17.2 | 63.8 | 0.5 |
| SIGMA (D _p /F ₀₀ in g/kN, or SN) | | | | 0.0 | 2.0 | 0.5 | 0.4 |
| RANGE (D _p /F ₀₀ in g/kN, or SN) | | | | 0.05-0.11 | 15.35-19.86 | 63.44-64.52 | 0.1-1 |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|---------------|
| BAROMETER (kPa) | 96.7-99.1 |
| TEMPERATURE (K) | 285.3-294.3 |
| ABS HUMIDITY (kg/kg) | 0.0044-0.0104 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.92 |
| AROM (%) | 15.41 |

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: General Electric Company
 TEST LOCATION: PTO, Ohio
 TEST DATES: 20/10/2015-23/05/2017

NO_x REGULATION PARAGRAPH

| | |
|---|-------------------|
| | 2.3.2 c) (CAEP/4) |
| | 2.3.2 d) (CAEP/6) |
| x | 2.3.2 e) (CAEP/8) |

REMARKS

1. Ref. GE Aviation Report P20-2017-MT-019_R-3400.00/Rev. 0
2. Engine S/N 904-010/01 and S/N 904-114/01
3. SMOKE NUMBER for each LTO mode is average of interpolated values from curve fit for each test run
4. AVERAGE SN (MAX) is average of maximum smoke number between 7% and 100% F00 for each test run

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)